Amendments to the Specification:

[0001] This Application is a Continuation of U.S. Patent Application Serial No. 09/925,884, filed August 6, 2001, and now pending, which is a Continuation-in-Part of U.S. Patent Application Serial Nos. 09/621,028, filed July 21, 2000, and now ~~pending~~ U.S. Patent No. 6,869,487; 08/853,649, filed May 9, 1997, now U.S. Patent No. 6,240,933; and 09/061,318, filed April 16, 1998, and now abandoned. Priority under 35 U.S.C. 120 and 363 is also claimed to U.S. Patent Application Serial No. 60/145,350, filed July 23, 1999, and International Application No. PCT/US99/08516, filed April 16, 1999, designating the U.S. and published in English, which claims priority to U.S. Patent Application Serial Nos. 60/099,067 filed September 3, 1998; 60/125,304 filed March 19, 1999; and U.S. Patent Application Serial No. 09/061,318 filed April 16, 1998, and now abandoned. The above mentioned applications are also incorporated herein by reference.

[0039] The preferred process liquid is de-ionized water. Other process liquids, such as other aqueous or non-aqueous solutions, may also be used. Water can form a continuous film on the workpiece surface. This film or layer, if excessively thick, acts as a diffusion barrier to the ozone, thereby slowing reaction rates. The thickness of this layer is controlled by controlling the spin speed of the workpiece, and controlled spraying of the process liquid, or a combination of one or more of these techniques, to form the liquid layer into a thin boundary layer. This allows the ozone to diffuse through the boundary layer of liquid, to the surface of the workpiece, where it reacts with the organic materials or other contaminants that are to be removed. Ozone has a limited solubility in the heated liquid (preferably water). However, ozone is readily able to diffuse through the liquid boundary layer and react with the surface of the workpiece or wafer (whether it is silicon, photoresist, etc.) at the liquid/solid interface. Thus diffusion, rather than dissolution, is the primary mechanism used to deliver ozone to the surfaces of the wafers. The ozone can either be dissolved into the liquid, or it can be injected into a fluid supply stream which causes portions of the ozone gas to dissolve into the liquid, and other portions of the ozone to be entrained into the fluid supply stream.